

# Curriculum Vitae

PATRICK TALOU

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Office address:	T-16, Nuclear Physics Group, Theoretical Division, MS B283 Los Alamos National Laboratory Los Alamos, New Mexico 87545
Office phone:	(505) 667-3821
Fax:	(505) 667-1931
E-mail address:	talou@lanl.gov
URL:	<a href="http://public.lanl.gov/talou">http://public.lanl.gov/talou</a>
Home address:	36, Sierra Rosa Santa Fe, New Mexico 87507
Home phone:	(505) 424-4346
Place and date of birth:	Suresnes (92) - France ; January 2, 1973
Nationality:	French
Marital status:	Married, 1 child.

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## HIGHER EDUCATION

- 90-92 University of Bordeaux I, France. "DEUG"  
(with honors).
- 92-95 University of Orsay, Paris XI, France. MS ("Magistère") in Theoretical Physics,  
June 1995 (with honors).
- 95-98 University of Bordeaux I, France. PhD in Theoretical Nuclear Physics  
(with honors).

## PRESENT POSITION

Limited-Term Staff Member, T-16, Nuclear Physics Group, Theoretical Division, Los Alamos National Laboratory, New Mexico.

## PREVIOUS POSITIONS

1999-2000: Postdoc in T-DO, Los Alamos National Laboratory, New Mexico.  
2000-june 2001: Postdoc in T-16, Nuclear Physics Group, Los Alamos National Laboratory,

New Mexico.

### VISITING POSITIONS

- Undergraduate assistant training, Astronomical observatory of Bordeaux-Floirac, France, May-July 1993. Topic: theories of particle diffusion (Rayleigh, Mie, ...).
- Graduate assistant training, Société Générale des Techniques Nouvelles, Réseau Eurisys, Paris, France, April-July 1994. Topic: evaluation of the efficiency of shielding materials against nuclear radiations.
- Visiting scientist, Lawrence Berkeley National Laboratory, Nuclear Science Division - Theory Group, Nov.-Dec. 1995. Topic: deviations from the well-known exponential decay law at very short and very large times.
- Visiting scientist, Los Alamos National Laboratory, July-Sept 1996. Topic: dynamics of fission and alpha-decay.
- Graduate Research Assistant, Los Alamos National Laboratory, April-Sept. 1997: study of proton decay from deformed nuclei in a time-dependent formalism.

### RESEARCH INTERESTS

Nuclear reaction theory, nuclear data processing, accelerator-driven systems, multidimensional quantum tunneling, light particles emission from deformed nuclei, quantum physics, parity violation in the nucleus, ...

### LIST OF PUBLICATIONS

- P. Talou, P.G. Young, and M.B. Chadwick, "Improved covariance analysis of fission cross sections for ADS", to appear in Proceedings of Int. Conf. on Nuclear Data for Science and Technology (ND2001), Oct. 7-12, 2001, Tsukuba, Japan.
- P. Talou, M.B. Chadwick and P.G. Young, "Recent developments in nuclear data for accelerator-driven systems", lectures given at the Workshop on *Nuclear data for Science & Technology: accelerator-driven waste incineration*, Sep. 10-24, 2001, ICTP Trieste, Italy.
- P. Talou, B. Giraud, and D. Strottman, "Quantum tunneling in a time-dependent setting: the case of proton decay from exotic nuclei" (in preparation).
- P. Talou, "Single-particle decay dynamics in spherical and deformed nuclei" (in preparation).
- P. Talou, review talk on "Theory of proton emitters", Proceedings of the International conference on "Selected topics on N=Z nuclei", Lund University Press 2000.
- D. Strottman, N. Carjan, and P. Talou, *Physica Scripta* **T88**, 148-152 (2000).

- P. Talou, N. Carjan, C. Negrevergne, and D. Strottman, Phys. Rev. **C62**, 014609 (2000).
- P. Talou, N. Carjan, and D. Strottman, Phys. Rev. **C50**, 054318 (1999).
- P. Talou, “Dynamical calculation of proton emission from a deformed to a spherical nucleus”, 1st Int. Symposium on Proton Emitting Nuclei, PROCON’99, Oak Ridge, Tennessee. AIP Conf. Proceed. 518, Ed. J. Batchelder.
- N. Carjan, P. Talou, and D. Strottman, “Decay of single-proton metastable states in oriented deformed nuclei”, 1st Int. Symposium on Proton Emitting Nuclei, PROCON’99, Oak Ridge, Tennessee. AIP Conf. Proceed. 518, Ed. J. Batchelder.
- P. Talou, N. Carjan, and D. Strottman, Nucl. Phys. **A647**, 21 (1999).
- N. Carjan, P. Talou, and D. Strottman, Proceedings of the International Conference “The nucleus: new physics for the new millenium”, 18-22 January 1999, Faure, South Africa.
- P. Talou, N. Carjan, and D. Strottman, Phys. Rev. **C58**, 3280 (1998).
- N. Carjan, P. Talou, and D. Strottman, Proceedings of the 2nd International Conference ENAM98, 23-27 June 1998, Michigan.

#### INVITED TALKS

- Invited Lecturer at the International Center for Theoretical Physics, ICTP, Trieste, Italy, on “Accelerator Transmutation of Nuclear Waste”, 13-14 Sept. 2001.
- Invited Speaker at the International Workshop on “Exotic aspects of nuclear decay by light-particle emission”, 20-24 Nov. 2000, ECT\*, Trento, Italy.
- Invited Speaker at the International Conference Pingst’2000 “Selected topics on N=Z nuclei”, June 6-10, 2000, Lund, Sweden.

#### MISCELLANEOUS

- Founder of the association of Students in physics at the University of Bordeaux I in 1995.
- Member of the association “AFUL”, promoting Linux and Free Softwares in France.
- Develop educational tools in physics under the GNU/GPL licence.